

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-57. (Canceled).

58. (Currently Amended) A method for producing ~~avian stem cell lines~~ a nonadherent chicken embryonic stem cell line capable of proliferating in a basal medium in the absence of exogenous trophic factors and cytokines, the method comprising culturing ~~avian-chicken~~ embryonic stem cells in at least 20 successive passages of a culture medium, wherein:

(a) in at least the first passage, ~~(a) the avian-chicken~~ embryonic stem cells are cultured in a primary medium comprising:

(i) ~~at least the growth factors (trophic factors)~~ the trophic factors SCF, IGF-1 and bFGF, and ~~at least one cytokine selected from the group of LIF, IL-11, IL-6,~~ the cytokines CNTF, ~~oneostatin and cardiotrophin~~ IL-6, soluble IL-6 receptor and IL-11;

(ii) an inactivated feeder comprising mouse fibroblast STO cells;
and

(iii) a basal medium selected from the group consisting of DMEM, GMEM, HamF12 and MacCoy medium, wherein the basal medium is supplemented with fetal calf serum at a-an initial concentration of 12-8%; and wherein in subsequent passages,

(b) ~~the avian-chicken~~ embryonic stem cells obtained in step (a) are cultured in ~~the~~ a primary medium that has been modified by progressively depriving the primary medium of the trophic factors and cytokines defined in (i) of step (a), wherein the progressive withdrawal of each trophic factor and cytokine is carried out by successive passage of the chicken embryonic stem cells in a culture medium having less of at least one of the trophic factors or cytokines as compared to the culture medium of the prior passage, until the medium is free of all of the trophic factors and cytokines; of said growth factors; and thereby

(c) ~~producing adherent or the~~ nonadherent chicken embryonic stem cell lines capable of proliferating in a basal medium in the absence of exogenous ~~growth factor~~ trophic factors and cytokines is produced by high-density inoculation of the chicken embryonic stem cells obtained in step (b) into a bacteriological dish.

59-60. (Canceled).

61. (Previously Presented) The method of claim 58, wherein the cells derived from the lines obtained in step (c) are capable of proliferating for at least 50 days.

62-65. (Canceled).

66. (Currently Amended) The method of claim 58, further comprising the following step (d):

(d) proliferating in suspension the nonadherent chicken embryonic stem cells derived from the lines obtained in step (c) in a medium free of exogenous trophic growth factors and cytokines.

67. (Canceled).

68. (Currently Amended) The method of claim 58, wherein the cells derived from the lines obtained in step (c) have ~~at least one characteristic selected from the group consisting of~~ a high nucleocytoplasmic ratio, an endogenous alkaline phosphatase activity, an endogenous telomerase activity, and a reactivity with specific antibodies selected from the group of antibodies SSEA-1, (TEC01) and EMA-1.

69. (Currently Amended) The method of claim 58, wherein the cells used in step (a) are obtained by suspending cells from blastodermal disks of fertilized eggs in a culture medium comprising ~~at least one the~~ tropic factors and cytokines as defined in (i) of step (a); ~~b-FGF and SCF, wherein said cells being are~~ inoculated into a ~~lawn of feeder~~ comprising mouse fibroblast STO cells, incubated, and then collected.

70. (Canceled).

71. (Currently Amended) The method of claim 58, further comprising the following step (d):

~~of~~(d) proliferating cells derived from the lines obtained in step (c) in a basic medium selected from the group ~~of medium~~ consisting of DMEM, GMEM, HamF12 and McCoy, wherein the medium is supplemented with various additives selected from the group consisting of nonessential amino acids, vitamins and sodium pyruvate.

72. (Canceled).